

**Notice of Allowability**

Application No.

10/712,663

Applicant(s)

LEE ET AL.

Examiner

Amelia A. Owens

Art Unit

1625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed 2/28/2006.
2. ☒ The allowed claim(s) is/are 1-3,6-13,15-20,22-24 and 26-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other NO DRAWINGS.

*Amelia Owens*  
**AMELIA OWENS**  
**PRIMARY EXAMINER**  
**GROUP 1200**  
1600

### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

1. Claims 1-3,6-13,15-20,22-24,26-28 are pending and are allowed.
2. USP 6566393 B1 is noted. However, Z must be  $\text{CHR}_2(\text{CH}_2)_n\text{R}_3$  where R2 is COOH, NH<sub>2</sub>, COOCH<sub>3</sub>, COOCH<sub>2</sub>Ph, and NHCOOCH<sub>2</sub>Ph; whereas in the instant application Z is  $(\text{CH}_2)_n\text{R}_3$  creating a clear demarcation over USP 6566393 B1.
3. The state of the art is that etoposide has been used to treat a variety of neoplasms such as small-cell lung. See abstract Kobayashi et al, Pharmacodynamics and long-term toxicity of Etoposide, PMID: 8070030. See also abstract Sinkule, Etoposide: a semisynthetic epipodophyllotoxin. Chemistry, pharmacology, pharmacokinetics, adverse effects and use as an antineoplastic agent. PMID: 6326063. See also Atienza et al, Phase II study of oral Etoposide of patients with advanced breast cancer. PMID: 8625074. See also Zhi, High-grade endometrial stromal sarcoma in a 10-year-old girl: case report. PMID: 9849013. *All references are already of record.*

See also, Yasumizi, clinical trial of daily low-dose oral etoposide for patients with residual or recurrent cancer of the ovary or uterus. PMID: 8640467 (1995) and Ajani, Oral etoposide for patients with metastatic gastric adenocarcinoma. PMID: 10198733 (1999). Structurally similar compounds would be expected to have the same activity. Clearly compounds having the core structure depicted below have been shown to have anti-cancer activity against a variety of cancers. Thus, the claimed compounds would be expected to have the same activity as the prior art compounds.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia A. Owens whose telephone number is 571-272-0690. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Amelia A. Owens  
Primary Examiner  
Art Unit 1625